



## **Natural Resource Services, Inc.**

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July 31, 2018

Michelle Carlson, PE  
BL Companies  
355 Research Parkway  
Meriden, CT 06450

RE: Freshwater Wetland Delineation  
Kingstown Road; A.P. 40-1, Lot 125  
South Kingstown, Rhode Island

Dear Ms. Carlson:

Natural Resource Services, Inc. (NRS) has completed its freshwater wetland delineation of the above-referenced parcel. This field work was performed in accordance with the delineation standards outlined in Appendix 2 of the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (effective July 16, 2014). Rule 8.03(D) of the wetland regulations states that all delineations performed by wetland consultants, including NRS, are not considered valid for regulatory purposes until the work is reviewed and approved by the RI Department of Environmental Management, Office of Water Resources (DEM, OWR). NRS wetland biologist Carolyn Decker performed the delineation July 31, 2018.

The tax assessor's database for the Town of South Kingstown lists the parcel at 1.16 acres. The property lies west of Kingstown Road approximately 200 feet south of its intersection with Southwinds Drive. The property is vacant land. The site is predominately occupied by invasive species such as autumn olive (*Elaeagnus umbellata*) and Japanese knotweed (*Fallopia japonica*). The site is within a Natural Heritage Area (Reference ID#129) as mapped by the DEM. However, no rare species were observed during the wetland delineation.

The Rhode Island Soil Survey (2015) depicts the property with non-hydric and hydric soils. The majority of the lot is mapped as the non-hydric soil series Udorthents-urban land complex (UD). UD soils are generally well-drained or excessively drained soils that have been disturbed by human activity such as filling or other forms of construction. The hydric soil series Ridgebury, Whitman, and Leicester extremely stony fine sandy loams (Rf) is mapped in the rear of the property. Rf soils are typical of wetlands. Given the configuration of these soil designations relative to the delineated wetland edge, the NRS findings were generally consistent with that of the soil series.

The property contains wetland resource areas within the jurisdiction of the DEM. The NRS delineation marked the limit of a swamp with flagging labeled A1 – A15. The swamp is in the rear of the property with a narrow portion of swamp extending along the western property line toward the neighboring parking lot. The swamp extends off-site to the southwest.

The regulations define a swamp as “a place greater than three (3) acres in extent wholly or partly within the state of Rhode Island where groundwater shall be near or at the surface of the ground for a significant part of the growing season, or where runoff water from surface drainage shall collect frequently, and/or where a vegetational community shall be made up of a significant portion...predominantly hydrophytic vegetation.” Swamps receive a regulatory setback known as a 50 foot perimeter wetland.

The dominant woody plant species in the swamp include red maple (*Acer rubrum*), black tupelo (*Nyssa sylvatica*), sweet pepperbush (*Clethra alnifolia*), and spicebush (*Lindera benzoin*). Skunk cabbage (*Symplocarpus foetidus*), cinnamon fern (*Osmundastrum cinnamomeum*) and greenbrier (*Smilax rotundifolia*) are dominant herbaceous and vine species. These are all plant species typical of wetlands in Rhode Island.

I used a hand-held GPS unit (Trimble Geo7X) to approximately locate the wetland delineation on the subject property. While this work does not represent a professional survey, the information obtained is valuable for preliminary planning purposes. I have enclosed a geographic information systems (GIS) graphic with this letter. The graphic is a 2014 aerial image of the subject property. The GPS data obtained during our field work of the wetland edge is provided as an overlay on the image. I have also approximated the limit of the 50 foot perimeter wetland on the graphic.

The wetland delineation flagging series are listed in the table below:

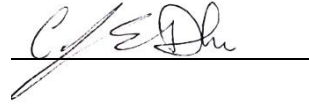
<b>Flagging Series</b>	<b>Resource Classification</b>	<b>Regulatory Setback</b>
A1 – A15	Swamp	50 ft. Perimeter Wetland

It is important to recognize that the 50 foot perimeter wetland is regulated as part of the actual wetland and not a simple buffer zone. Any development proposal which would alter the swamp or 50 foot perimeter wetland requires a permit from the Department of Environmental Management, Office of Water Resources (DEM, OWR).

It is important to note that a new state freshwater wetlands law was enacted in July of 2015. This law made changes to the jurisdictional limits currently utilized in the regulations. The Department of Environmental Management (DEM) is writing new regulations which will require buffer zones for all freshwater wetlands. While a comprehensive timeline has not been established for the enactment of these rules, it is anticipated that they will be in effect at some point in 2018. If you submit an application prior to the promulgation of these rules, your project would then be grandfathered under the current setback standards.

I hope that the information provided is of assistance to you. Please do not hesitate to contact my office if you have any questions or require additional information.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'C. Decker', is positioned above a solid horizontal line.

Carolyn Decker  
Wetland Biologist

*enclosures*

# Legend

- Approximate Site Location (Town GIS)
  - ▲ Approximate Wetland Delineation
  - Approximate Wetland Area
  - - - 50' Perimeter Wetland
- 0 50 100 200 Feet



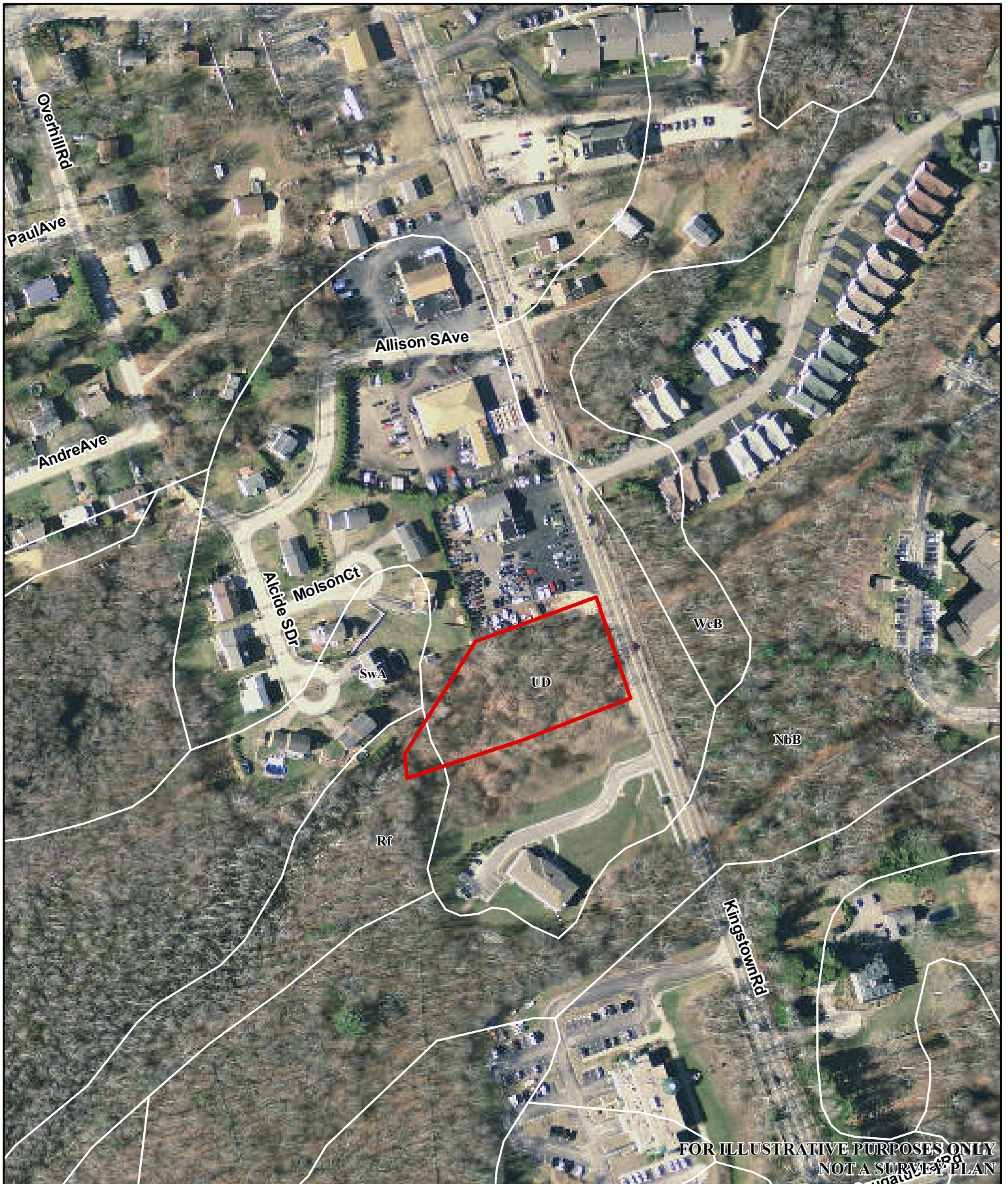
FOR ILLUSTRATIVE PURPOSES ONLY  
NOT A SURVEY PLAN

**Site Sketch for Approximate  
Wetland Delineation  
Kingstown Road  
A.P. 40-1, Lot 125  
South Kingstown, RI**

*Performed by  
Carolyn Decker 7/31/18  
Located using hand-held Trimble Geo7x*



**RIGIS** 2014 USGS Digital True  
Color Orthophotography  
**Natural Resource Services, Inc.**  
PO Box 311 p: (401) 568-7390  
180 Tinkham Lane f: (401) 568-7490  
Harrisville, RI 02830 (c) RIGIS

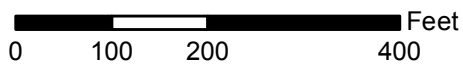


**USDA Soil Survey Map**  
**Kingstown Road**  
**A.P. 40-1, Lot 125**

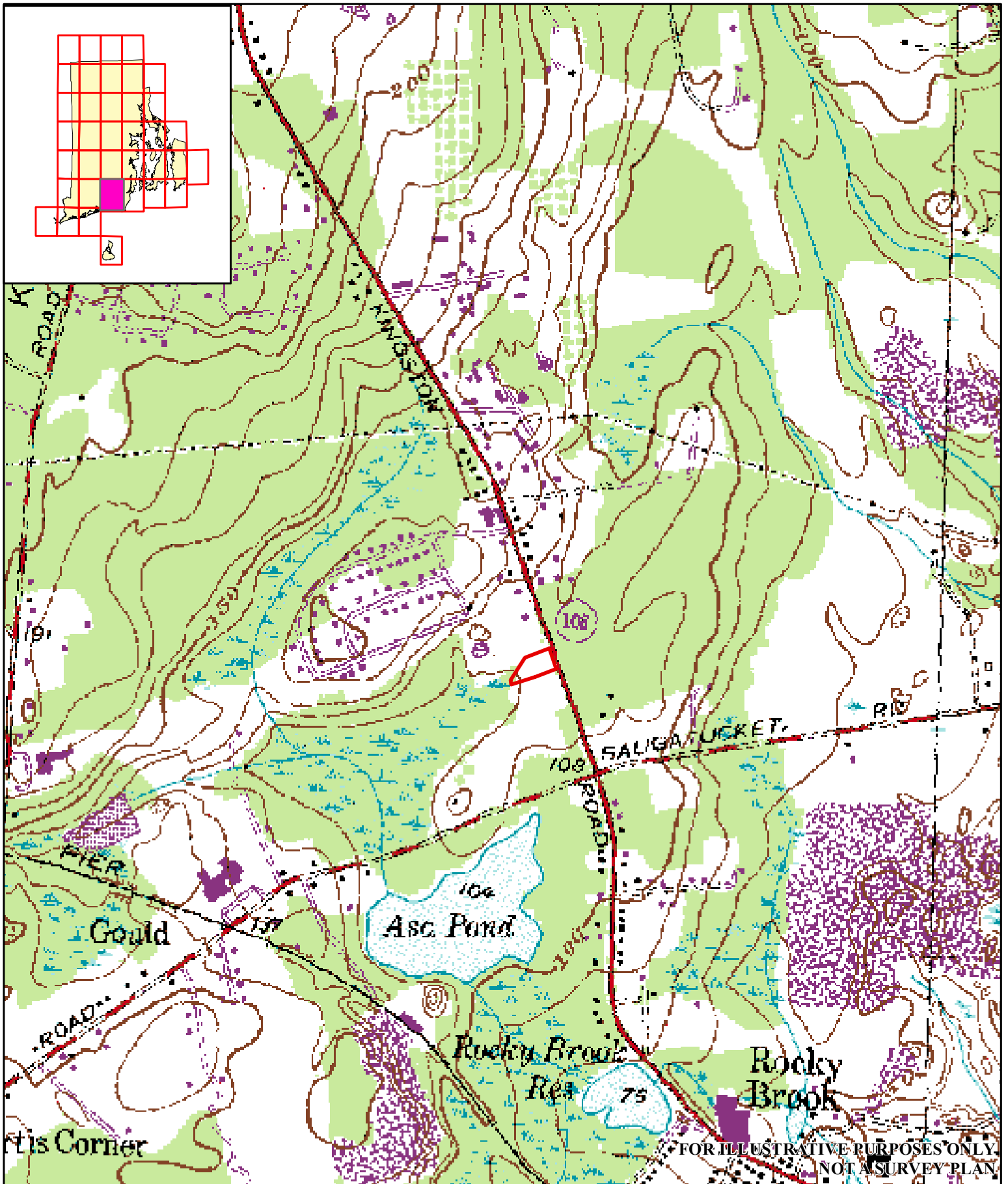
South Kingstown, RI

 Approximate Site Location


2014 USGS Digital True  
 Color Orthophotography

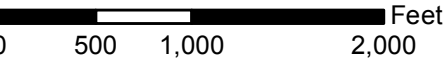


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**USGS Topographic Map**  
**Kingstown Road**  
**A.P. 40-1, Lot 125**  
 South Kingstown, RI  
 Kingston Quad Map

 **Approximate Site Location**  
 USGS Topographic Series  
 Contour Interval 10 Feet  
 National Geodetic Vertical Datum of 1929

 **Feet**  
 0 500 1,000 2,000

  
**RIGIS**  
**Natural Resource Services, Inc.**  
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**Wetland Edge Delineation Data Form (Wetland)**

Applicant:  
Project: Kingstown Road  
City/Town: North Kingstown, RI

Wetland No.: 1  
Flag No. Sequence: A1 – A15  
Date: July 31, 2018

Vegetation: List the three dominant species in each vegetative strata along with their NWI status.

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1. <i>Nyssa sylvatica</i>	FAC	1. <i>Osmundastrum cinnamomeum</i>	FACW
2. <i>Acer rubrum</i>	FAC	2. <i>Symplocarpus foetidus</i>	OBL
3.		3. <i>Thelypteris noveboracensis</i>	FAC
<u>Saplings/Shrubs</u>		<u>Woody Vines</u>	
1. <i>Clethra alnifolia</i>	FAC	1. <i>Smilax rotundifolia</i>	FAC
2. <i>Lindera benzoin</i>	FACW	2.	
3. <i>Rosa multiflora</i>	FACU	3.	

List other vegetative species noted which may have affected determination of the wetland edge: *Fallopia japonica* (FACU)

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Soil: SCS Soil Survey Mapping Unit: Rf  
On Hydric Soils List (Y / N) Y

Soil Profile: (Note wetland flag no. nearest soil test pit): A3

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
A	0-10"	10YR 2/1	-	-	-
B	10-18"	10YR 5/2	10YR 3/2 streaks	-	-
-	-	-	-	-	-

Other indicators of wetland hydrology (eg. water marks, drainage patterns, root Rhizospheres, etc): Buttressed roots, leaf staining  
Landscape Position: Toeslope  
Altered / atypical situation? (describe) \_\_\_\_\_  
Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Wetland Edge Delineation Data Form (Upland)

Applicant:  
Project: Kingstown Road  
City/Town: North Kingstown, RI

Wetland No.: 1  
Flag No. Sequence: A1 – A15  
Date: July 31, 2018

Vegetation: List the three dominant species in each vegetative strata along with their NWI status.

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1. <i>Acer rubrum</i>	FAC	1. <i>Fallopia japonica</i>	FACU
2.		2.	
3.		3.	
 <u>Saplings/Shrubs</u>		 <u>Woody Vines</u>	
1. <i>Berberis thunbergii</i>	FACU	1. <i>Celastrus orbiculatus</i>	UPL
2. <i>Rosa multiflora</i>	FACU	2.	
3. <i>Elaeagnus umbellata</i>	FACU	3.	

List other vegetative species noted which may have affected determination of the wetland Edge: \_\_\_\_\_  
\_\_\_\_\_

Soil: SCS Soil Survey Mapping Unit: \_\_\_\_\_ UD  
On Hydric Soils List (Y / N) \_\_\_\_\_ N

Soil Profile: (Note wetland flag no. nearest soil test pit): \_\_\_\_\_ A3

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
HTM	0-18"	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Other indicators of wetland hydrology (eg. water marks, drainage patterns, root Rhizospheres, etc.): \_\_\_\_\_

Landscape Position: \_\_\_\_\_ Footslope \_\_\_\_\_

Altered / atypical situation? (describe) \_\_\_\_\_

Comments: Previously disturbed area